Application No. 10/761,294

Response to Office Action of November 17, 2005

Attorney Docket No.: 1020/0134PUS1

**AMENDMENTS TO THE CLAIMS** 

1. (currently amended) A method for determining an interior temperature based on a value for

incident sun radiation recorded with a photo sensor and/or a surface temperature at a measuring

area recorded with a temperature sensor,

wherein air circulation in front of the measuring area is determined, which, is weighted as

a variable heat-transmission resistance, and is entered as a correction value into the recorded

incident sun radiation,

wherein in a first adaptive measurement with the temperature sensor, a step response of

the reaction at the temperature sensor at zero air circulation is taken and recorded [[,]] in

response to a heat element being [[is]] provided with a signal, which is recorded as a step

response on the sensor, and

wherein from the difference of the step response as compared to an adaptively a second

response determined reaction, the presence or absence of air circulation flow is determined,

which determination is utilized for determining the interior temperature.

2. (original) The method according to claim 1, wherein with air circulation present, the step

response on the temperature sensor shows a smaller impulse height and impulse width than a

step response when no air circulation is present.

3. (currently amended) The method An arrangement for executing the method according to claim

1, wherein the eomprising a sensor for measuring the incident sun radiation and/or at least one

sensor for determining the surface temperature at the measuring area, and a heat element is in

close proximity of and thermally coupled to the temperature sensor.

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4. (currently amended) The method according to claim 1, wherein the [[A]] temperature sensor

comprises: for determining the interior temperature of a passenger area, comprising:

at least one sensor for determining the surface temperature of the [[a]] measuring area,

and the [[a]] heat element, which is thermally coupled with the at least one sensor.

5. (currently amended) The method temperature sensor according to claim 4, wherein the thermal

coupling is achieved via a damping segment.

6. (currently amended) The method temperature sensor according to claim 4, wherein the

damping segment is a foil with conduction tracks attached thereto.

7. (currently amended) The method temperature sensor according to one of claim 4,

wherein the temperature sensor is located in a housing and is arranged in an [[the]] upper

part of a foil, which serves as a substrate for the temperature sensor, and into which are injected

at least the sensor for determining the surface temperature of the measuring area and the heat

element, and

wherein the housing is closed off towards a lower portion thereof [[the]] bottom with a

casting compound, with contact pins leading through it.

8. (currently amended) The method temperature sensor according to claim 7, wherein the

housing is made of infrared-permeable material, at least above an additional sensor for

measuring the incident sun radiation, which is attached to the foil.

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9. (currently amended) The method temperature sensor according to claim 6 one of claims 4,

wherein the temperature sensor is located in a housing,

wherein the foil is flexible and is folded and inserted into the housing, together with the

attached sensor for determining the surface temperature of the measuring area and the heat

element, and

wherein foil tracks lead from the housing.

10. (currently amended) The method temperature sensor according to claim 9, wherein an

additional sensor for determining a [[the]] self-heating of the control element is attached to the

foil in the housing, whereby the housing is open in this area.

11. (currently amended) The method temperature sensor according to claim elaims 9, wherein

the photo sensor measuring incident sun radiation is attached to the foil, and that the housing has

an infrared-light permeable area around the sensor.

12. (currently amended) The method temperature sensor according to claim 11, wherein when

the photo sensor is arranged below the foil, the foil is made of infrared-light permeable material

in this area.

13. (currently amended) The method temperature sensor according to claim 7, wherein the

temperature sensor is manufactured utilizing MID technology.

14. (currently amended) The method temperature sensor according to claim 9, wherein the

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temperature sensor is manufactured foil injection technology.

15. (currently amended) The method temperature sensor according to claim 1, wherein the heat

element is a NTC.

16. (currently amended) The method temperature-sensor according to claim 1, wherein the

interior temperature is the interior temperature of a motor vehicle.

17. (currently amended) A method for determining and adjusting the a temperature of an interior

of a vehicle, the method comprising:

measuring and storing a control value, the control value being representative of the

temperature of a control element surface that is provided in the interior of the vehicle value and

measured with a temperature sensor when there is no air movement within the interior of the

vehicle:

providing a pulsed signal to a heat element so that the temperature sensor exhibits a

temperature change;

measuring a step response of the temperature sensor;

comparing the step response of the temperature sensor with the control value;

determining a damping amount of the heat element on the basis of the comparison of the

step response of the temperature sensor with the control value;

determining a presence or absence of air flow in the interior of the vehicle on the basis of

a comparison of the damping amount with a predetermined value; and

determining the temperature of the interior of the vehicle on the basis of the

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## determination of the presence or absence of air flow

adjusting a control of a heating and air-conditioning system of a vehicle on the basis of the determination of the presence or absence of air-flow in the interior of the vehicle.

18. (new) The method according to claim 17, wherein adjusting a control of a heating and air-conditioning system of a vehicle is adjusted on the basis of the determination of the temperature of the interior of the vehicle.